

## CLAIMS

1. A non-aqueous UV-curable ink composition for ink jet printing comprising a colorant, a UV-curable organic diluent and a surfactant  
5 wherein the surfactant is selected from an acrylate-modified polydimethylsiloxane or a polyether-modified polydimethylsiloxane, said composition causing the loss of no more than 5% of the nozzles in an ink jet print head after 750 prints and providing a hole to area ratio of no more than 0.05.  
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2. An ink composition as claimed in Claim 1 wherein the composition causes the loss of no more than 1% of the nozzles in an ink jet print head after 750 prints.  
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3. An ink composition as claimed in Claim 1 or Claim 2 wherein the composition provides a hole to area ratio of no more than 0.02.  
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4. An ink composition as claimed in any of the preceding claims wherein the composition provides a hole to area ratio of no more than 0.007.  
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5. An ink composition as claimed in any of the preceding claims comprising from about 0.01 to about 2 wt % surfactant.
6. An ink composition as claimed in any of the preceding claims comprising about 0.3 wt % surfactant.  
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7. An ink composition as claimed in any of the preceding claims wherein the surfactant is an acrylate-modified polydimethylsiloxane.

8. An ink composition as claimed in any of the preceding claims wherein the surfactant is an acrylate-modified polydimethylsiloxane having from twelve to eighteen dimethylsiloxane groups.
- 5 9. An ink composition as claimed in any of the preceding claims wherein the surfactant is an acrylate-modified polydimethylsiloxane having fifteen dimethylsiloxane groups.
10. An ink composition as claimed in any of the preceding claims wherein the surfactant is a tetraacrylate-modified polydimethylsiloxane.
11. An ink composition as claimed in Claim 10 wherein the surfactant is not further organo-modified.
- 15 12. An ink composition as claimed in any of the preceding claims wherein the surfactant is not polyether-modified.
13. A non-aqueous UV-curable ink composition for ink jet printing comprising a colorant, a UV-curable organic diluent and a surfactant wherein the surfactant is a block copolymeric tetraacrylate-modified polydimethylsiloxane having fifteen dimethylsiloxane units.
- 20 14. An ink composition as claimed in any of the preceding claims wherein the surfactant is Addid® 300.
- 25 15. An ink composition as claimed in any of Claims 1 to 6 wherein the surfactant is a polyether-modified polydimethylsiloxane.
- 30 16. An ink composition as claimed in Claim 15 wherein the surfactant is BYK®-333.

17. An ink composition as claimed in any of the preceding claims consisting essentially of:

about 1 to about 10 wt % colorant;

about 15 to about 50 wt % dispersant system (based on amount of  
5 colorant);

about 75 to about 95 wt % UV-curable organic diluent;

about 0.01 to about 2 wt % surfactant; and

about 3 to about 20 wt % photoinitiator,

wherein the total amount of these components equates to 100 wt %.

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18. An ink composition substantially as hereinbefore described with reference to the accompanying Examples.

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19. An ink jet printing ink cartridge containing an ink composition as claimed in any of the preceding claims.

20. A method of producing a printed substrate comprising ink jet printing the substrate with an ink composition as claimed in any of Claims 1 to 18 and then exposing the substrate to UV-radiation.

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21. A method as claimed in Claim 20 wherein the substrate is packaging containing a foodstuff.

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22. A method as claimed in Claim 20 wherein the substrate is a web of foodstuff packaging material upstream of packaging formation.